PROGRAMS

1

CIVIL ENGINEERING TECHNOLOGY (A40140)

Engineering and Technology Pathway: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Civil Engineering Technology: A course of study that prepares students to use basic engineering principles and technical skills to carry out planning, documenting and supervising tasks in sustainable land development and public works and facilities projects. Includes instruction in the communication and computational skills required for materials testing, structural testing, field and laboratory testing, site analysis, estimating, project management, plan preparation, hydraulics, environmental technology, and surveying. Graduates should qualify for technician-level jobs with both public and private engineering, construction, and surveying agencies.

Associate in Applied Science Degree Program

		Course Hours Per Week		Semester Hours
First Semester (Fall)		Class	Lab	Credit
ACA-115	Success & Study Skills	0	2	1
BPR-130	Print Reading-Construction	3	0	3
CEG-210	Construction Mtls & Methods	2	3	3
EGR-110 or	Intro to Engineering Tech or			
EGR-150	Intro to Engineering	1	2	2
EGR-115	Intro to Technology	2	3	3
EGR-115A	Intro to Technology Lab	0	3	1
ENG-111	Writing and Inquiry	3	0	3
***	Technology Elective	1-3	0-2	2-3
	Credit Hours	12-14	13-15	18-19
Second Sem	ester (Spring)			
CEG-111	Intro to Gis and Gnss	2	4	4
CEG-235	Project Management/Estimating	2	3	3
EGR-120	Eng and Design Graphics	2	2	3
ENG-112 or	Writing/Research in the Disc or			
ENG-114	Prof Research & Reporting	3	0	3
MAT***	MAT-121 or MAT-171	2-3	2	3-4

		Course Hours Per Week		Semester Hours		
	Credit Hours	11-12	11	16-17		
Third Semes	ster (Summer)					
EGR-251	Statics	2	2	3		
SRV-110	Surveying I	2	6	4		
***	Physics Elective	3	2-3	4		
	Credit Hours	7	10-11	11		
Fourth Sem	Fourth Semester (Fall)					
CEG-211	Hydrology & Erosion Control	2	3	3		
CIV-111	Soils and Foundations	2	4	4		
SRV-111	Surveying II	2	6	4		
***	Humanities/Fine Arts Elective	3	0	3		
***	Directed Elective	0-3	2-30	3-4		
	Credit Hours	9-12	15-43	17-18		
Fifth Semes	ter (Spring)					
CEG-212	Intro to Environmental Tech	2	3	3		
SRV-240	Topo/Site Surveying	2	6	4		
***	Social/Beh Sciences Elective	3	0	3		
***	Directed Elective	0-3	2-30	3		
	Credit Hours	7-10	11-39	13		
Total Requir	ed Minimum Semester Hours Credit			75		
Technology		Class	Lab	Credit		
CIS-111	Basic PC Literacy	1	2	2		
EGR-125	Appl Software for Tech	1	2	2		
UAS-110	Intro to UAS Operations	3	0	3		
UAS-115						
0A3-113	Small UAS Certification	2	0	2		
Physics Elec	tives:	2	0			
		3	2			
Physics Elec	tives:			2		
Physics Elec PHY-131	tives: Physics-Mechanics	3	2	2		
Physics Elec PHY-131 PHY-151	Physics-Mechanics College Physics I General Physics I	3	2 2	4 4		
Physics Elec PHY-131 PHY-151 PHY-251	Physics-Mechanics College Physics I General Physics I ectives: Steel and Timber Design	3	2 2	4 4		
Physics Electory PHY-131 PHY-151 PHY-251 Directed Electory	Physics-Mechanics College Physics I General Physics I	3 3 3	2 2 3	4 4 4		
Physics Electory PHY-131 PHY-151 PHY-251 Directed Electory	Physics-Mechanics College Physics I General Physics I ectives: Steel and Timber Design	3 3 3 2	2 2 3 3	4 4 4 3		
Physics Electory PHY-131 PHY-151 PHY-251 Directed Electory CIV-221 CIV-222	Physics-Mechanics College Physics I General Physics I Cotives: Steel and Timber Design Reinforced Concrete	3 3 3 2 2	2 2 3 3 3 3 3	2 4 4 4 4 3 3		
Physics Electory PHY-131 PHY-151 PHY-251 Directed Electory CIV-221 CIV-222 MAT-172	Physics-Mechanics College Physics I General Physics I Steel and Timber Design Reinforced Concrete Precalculus Trigonometry	3 3 3 3	2 2 3 3 3 2	2 4 4 4 4 3 3 4		
Physics Electory PHY-131 PHY-151 PHY-251 Directed Electory CIV-221 CIV-222 MAT-172 MAT-263	Physics-Mechanics College Physics I General Physics I Sectives: Steel and Timber Design Reinforced Concrete Precalculus Trigonometry Brief Calculus	3 3 3 2 2 2 3 3	2 2 3 3 3 2 2	2 4 4 4 4 3 3 4 4		
Physics Electory PHY-131 PHY-151 PHY-251 Directed Electory CIV-221 CIV-222 MAT-172 MAT-263 MAT-271	Physics-Mechanics College Physics I General Physics I ctives: Steel and Timber Design Reinforced Concrete Precalculus Trigonometry Brief Calculus Calculus I	3 3 3 2 2 2 2 3 3 3	2 2 3 3 3 2 2 2	2 4 4 4 4 3 3 4 4 4		

3

- Tograms								
		Course Week	e Hours Per	Semester Hours				
WBL-113	Work-Based Learning I	0	30	3				
WBL-121	Work-Based Learning II	0	10	1				
WBL-122	Work-Based Learning II	0	20	2				

View Catalog Archives

Matthew Sheffield, Civil Engineering Technology Professor and Coordinator 170 Little Hall (910) 246-4940 sheffieldm@sandhills.edu